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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/701,510	02/02/2001	Martin Bergenwall	PM-275395	5373

7590 05/06/2004
PILLSBURY WINTHROP LLP
1600 TYSONS BOULEVARD
MCLEAN, VA 22102

EXAMINER

LEVITAN, DMITRY

ART UNIT	PAPER NUMBER
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2662

DATE MAILED: 05/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/701,510

Applicant(s)

BERGENWALL ET AL.

Examiner

Dmitry Levitan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8,9,19 and 20 is/are allowed.
- 6) ☒ Claim(s) 1,4,10,12,14-16,21,23 and 24 is/are rejected.
- 7) ☒ Claim(s) 2,3,5-7,11,13,17,18,22,25 and 26 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 February 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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Preliminary amendments, filed 11/30/00 and 01/08/01, have been entered. Claims 1-26 remain pending.

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 220, 21-23, 210, 119. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
2. Figures 1-5 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
3. The drawings are objected to because of typographical error on Fig. 14, PCS instead of FCS. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 4, 10, 12, 14, 15, 16, 21, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukasawa (US 4,720,829) in view of Reed (US 4,939,731).

Regarding claims 1, 10, 12, 21 and 23, Fukasawa substantially teaches limitations of claims 1, 10 and 21:

A data transmission method and station in a telecommunication system (Fig. 1 and 3:40-50), comprising

Transmitting data in frames of a link protocol provided with a retransmission mechanism from transmitting end to a receiving end (3:31-39), characterized by

Transmitting data in information fields of the protocol frames (transmission procedure 3:58-64),

Changing the length of the protocol frame during the connection (changing the frame length from L1 to L2 4:43-47),

Inserting the payload units to be retransmitted, which were transmitted for the first time before the frame length was changed, into one or several protocol frames with a new frame length (retransmission using L2 frames 4:47-52).

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Fukasawa does not teach transmitting data in fixed length data blocks, which have been numbered and use the numbering in retransmission.

Reed teaches transmitting data in fixed length data blocks (R-blocks on Fig. 4 and 4:33-41), which have been numbered (4:33) and use the numbering in retransmission (each R-block is acknowledged and only those in error are retransmitted 4:47-51). It would have been obvious to one of ordinary skill in the art at the time the invention was made to add transmitting data in fixed length data blocks, which have been numbered and use the numbering in retransmission of Reed to the system of Fukasawa to improve the system retransmission protocol.

In addition, regarding claim 21, Fukasawa teaches a mobile station (transmission side on Fig. 1 of the automobile 1:6-10).

Regarding claims 15 and 16, Fukasawa teaches obtaining the frame length directly from in-band signaling during the connection (ACK and NAK signals 4:26-38).

7. Regarding claims 4, 14 and 24, Fukasawa and Reed substantially teach limitations of claims 4, 14 and 24.

Fukasawa and Reed do not teach use of RLP, LAC, RLCP or MAC protocols for the link protocol with retransmission.

Official notice is taken that use of RLP, LAC, RLCP or MAC protocols for the link protocol with retransmission is well known and expected in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use RLP, LAC, RLCP or MAC protocols as the link protocol with retransmission in the

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system of Fukasawa and Reed as a design choice to utilize well-known existing protocols in the system.

Allowable Subject Matter

8. Claims 8, 9, 19 and 20 allowed.

9. Claims 2, 3, 5-7, 11, 13, 17, 18, 22, 25 and 26 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Fukasawa	US004720829	Error control encoding system.
Reed	US004939731	Data transmission system with automatic repeat request.
Dail	US005953344A	Method and apparatus enabling enhanced throughput efficiency.
Tsukamoto	US006625166B2	Communication system for time-division multiplexed data.
Grivna	US005949799A	Minimum latency data mover with auto-segmentation and reassembly.
Blasbalg	US004771391	Adaptive packet length traffic control in a LAN.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Levitan whose telephone number is 703-305-4384. The examiner can normally be reached on 8:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 703-305-4744. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Dmitry Levitan
Patent Examiner.
04/26/04.


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